

**WHAT IS CLAIMED IS:**

1           1. A system for transmitting a short message in an Internet phone, comprising:  
2           a gatekeeper for controlling setup of a call and at least one of a user registration and a  
3           cancellation in the Internet phone, said Internet phone being optionally connected with said  
4           gatekeeper, said Internet phone having a short message transmission module for transmitting, via  
5           a predetermined port, the short message including information corresponding to a telephone number  
6           of an Internet phone of a called party; and

7           a short message transmission server serving as a terminal registered in the gatekeeper for  
8           transmitting, to the gatekeeper, the information corresponding to the telephone number of the  
9           Internet phone of the called party as included in the short message when the short message is  
10          transmitted via the predetermined port so as to obtain an Internet protocol (IP) address of the Internet  
11          phone of the called party, and for transmitting the short message to the IP address of the Internet  
12          phone of the called party.

1           2. The system for transmitting a short message according to claim 1, wherein said short  
2           message transmission server transmits an admission request (ARQ) message for registration  
3           admission and status (RAS) protocol to the gatekeeper with the telephone number of the Internet  
4           phone of the called party included in the short message, and then receives an admission confirm  
5           (ACF) message to obtain therefrom the Internet protocol (IP) address of the Internet phone of the

6 called party.

1 3. The system for transmitting a short message according to claim 2, wherein said short  
2 message includes a tag portion, the telephone number of the Internet phone of the calling party, the  
3 telephone number of the Internet phone of the called party, and information regarding a length of a  
4 main sentence of the short message.

4. The system for transmitting a short message according to claim 1, wherein said short  
message includes a tag portion, the telephone number of the Internet phone of the calling party, the  
telephone number of the Internet phone of the called party, and information regarding a length of a  
main sentence of the short message.

5. A method for transmitting a short message in an Internet phone, comprising the steps of:  
providing a short message transmission server and a gatekeeper;  
3 transmitting the short message, including a telephone number of an Internet phone of the  
4 called party, from an Internet phone of the calling party to the short message transmission server;  
5 transmitting a call admission request message to the gatekeeper with the telephone number  
6 of the Internet phone of the called party included in the transmitted short message, and then receiving  
7 from the gatekeeper a call admission confirm message including an Internet protocol (IP) address  
8 of the Internet phone of the called party; and

transmitting the short message from the short message transmission server to the Internet protocol (IP) address of the Internet phone of the called party.

6. The method for transmitting a short message according to claim 5, wherein both the Internet phone of the called party and the Internet phone of the calling party, and the short message transmission server, communicate with each other via a predetermined port.

7. The method for transmitting a short message according to claim 6, wherein said short message includes a tag portion, the telephone number of the Internet phone of the calling party, the telephone number of the Internet phone of the called party, and information regarding a length of a main sentence of the short message.

8. The method for transmitting a short message according to claim 5, wherein said short message includes a tag portion, the telephone number of the Internet phone of the calling party, the telephone number of the Internet phone of the called party, and information regarding a length of a main sentence of the short message.

9. A system for transmitting a short message in an Internet phone, comprising:  
a gatekeeper for controlling setup of a call, said Internet phone being connected with said gatekeeper, said Internet phone transmitting, via a predetermined port, the short message including

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#### 4.4.4. *Phylogenetic relationships*

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